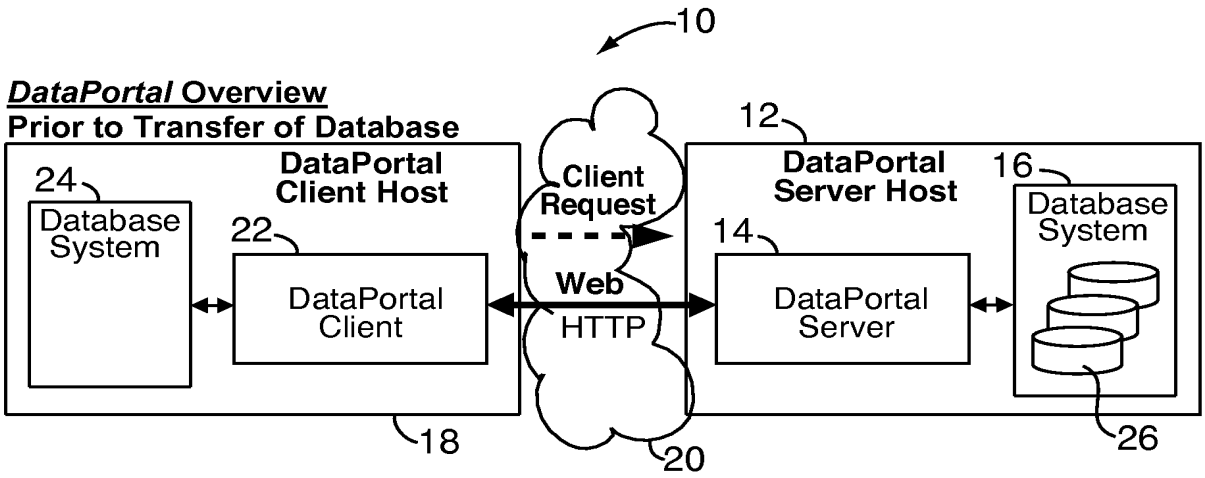

10
DataPortal Overview
Prior to Transfer of Database
12
DataPortal Client Host
DataPortal Server Host
16
24
Database System
Client Request
22
14
Database System
Web
HTTP
DataPortal Client
DataPortal Server
18
20
26

FIG. 1

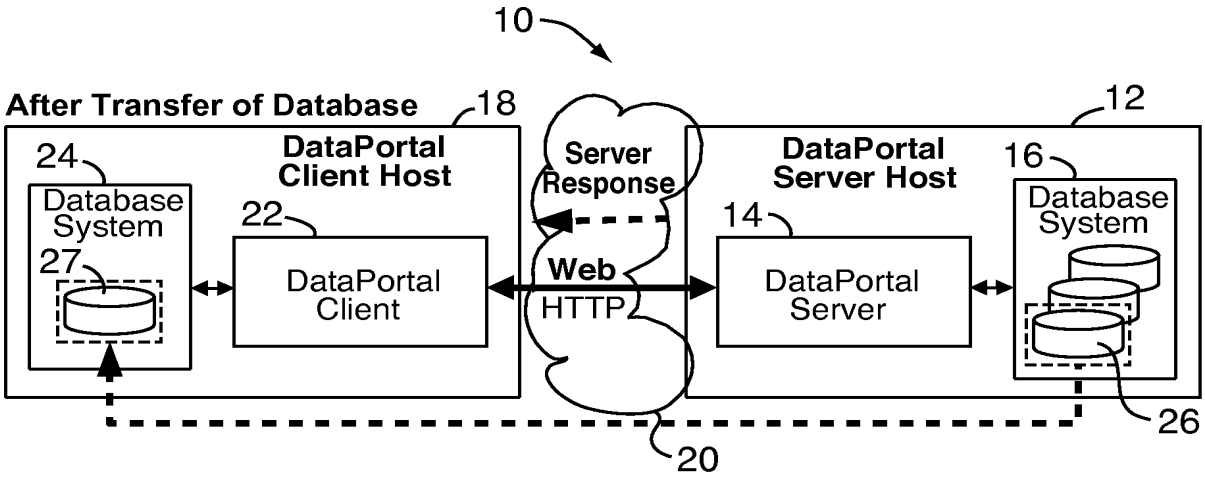

10
After Transfer of Database
18
12
DataPortal Client Host
DataPortal Server Host
24
Server Response
16
Database System
22
14
Database System
27
Web
HTTP
DataPortal Client
DataPortal Server
26
20

FIG. 2

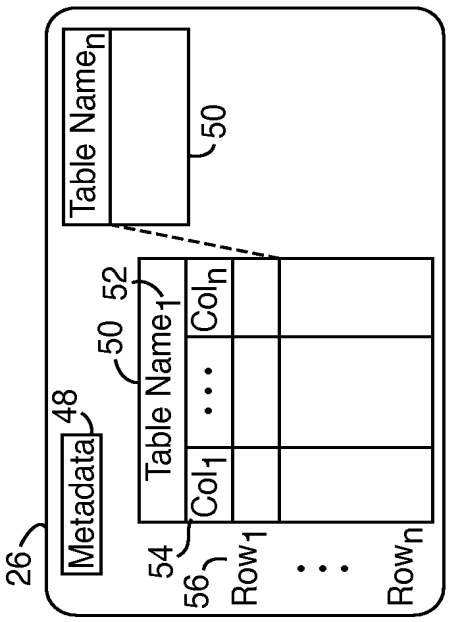


FIG. 5

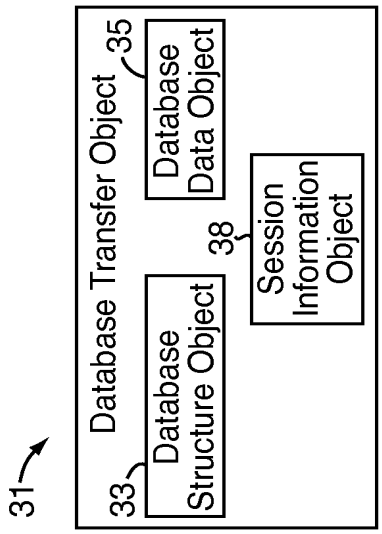


FIG. 5a

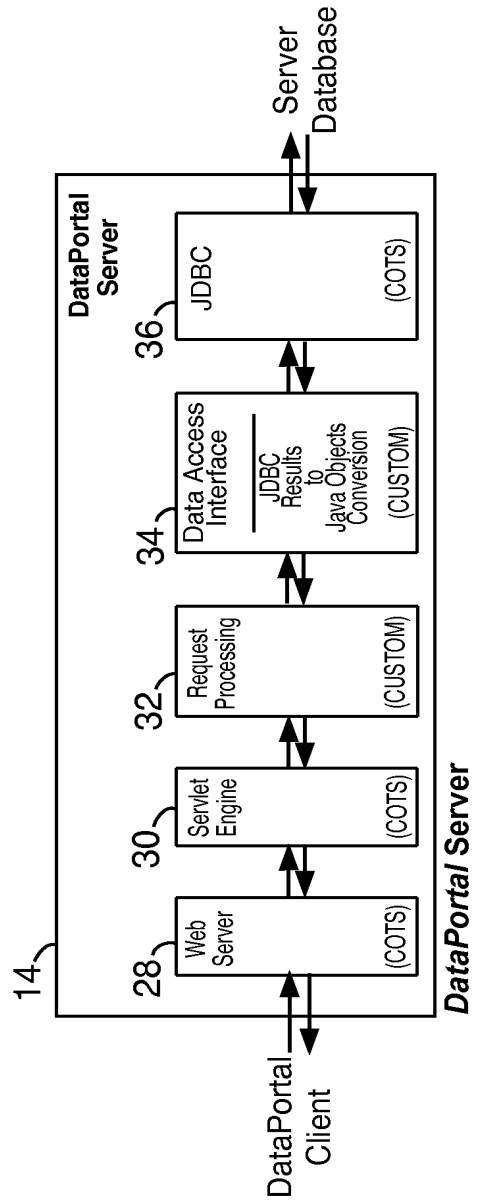


FIG. 3

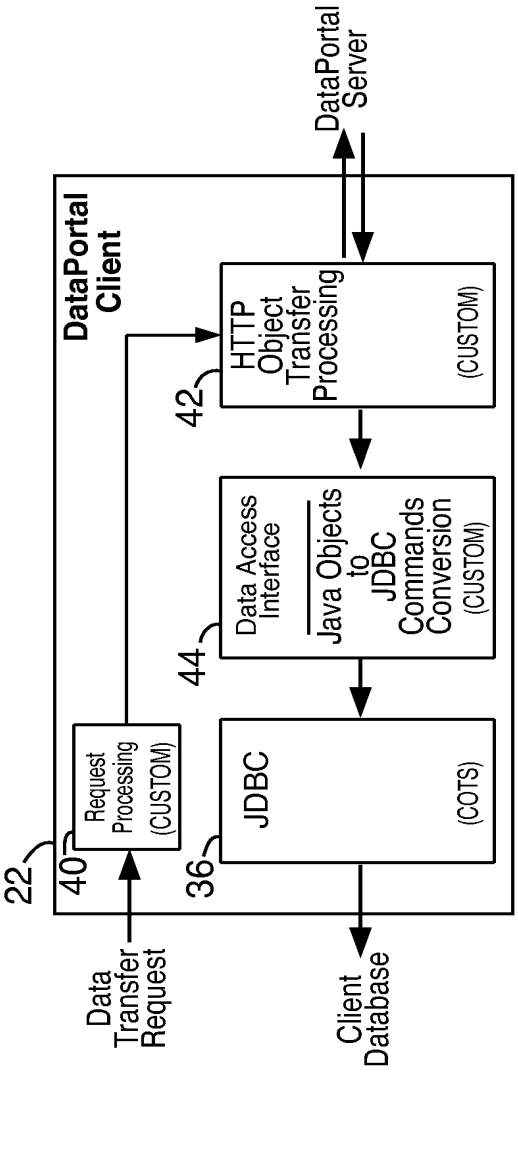


FIG. 4

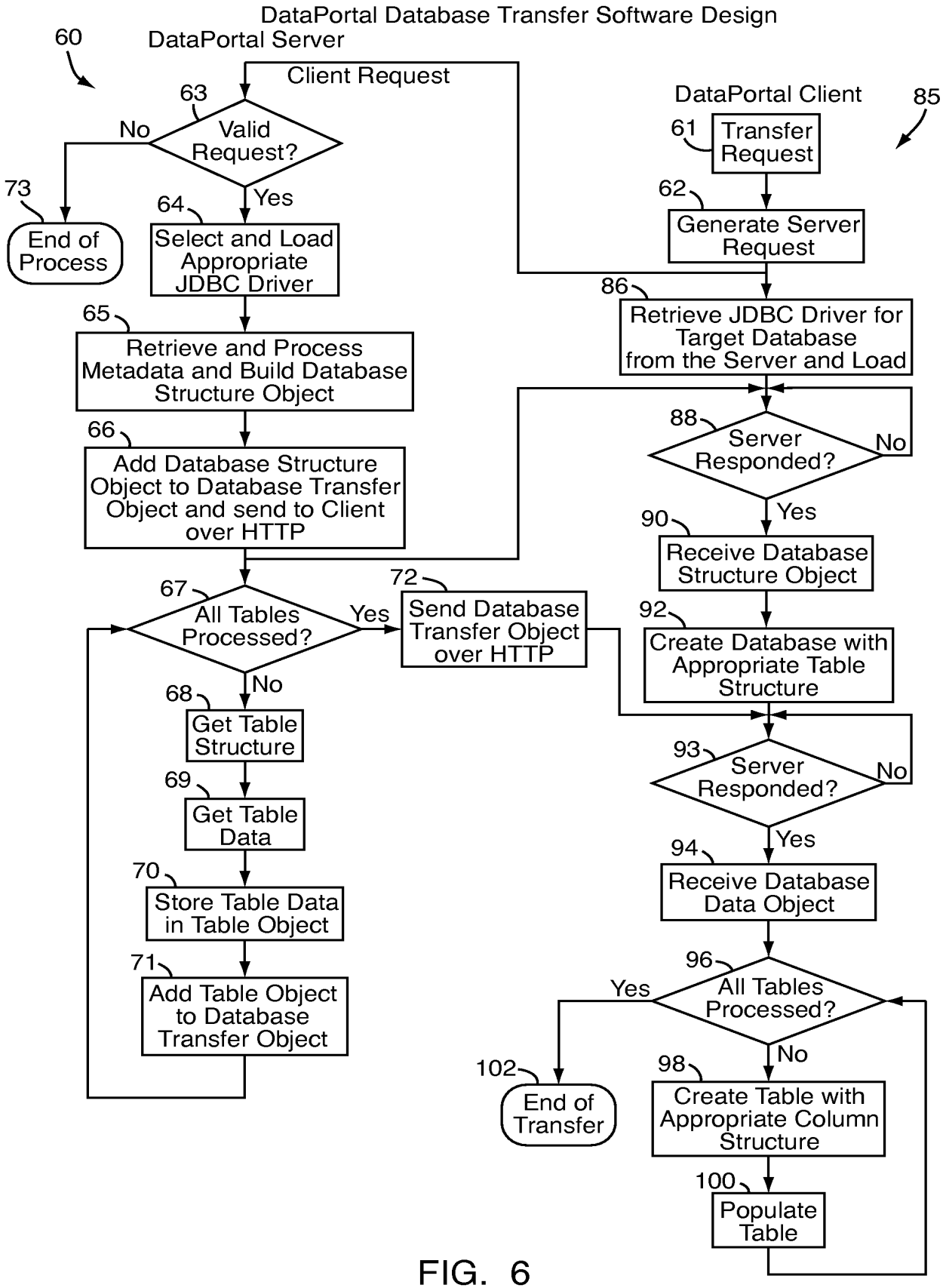

DataPortal Database Transfer Software Design
60
DataPortal Server
Client Request
63
Valid Request?
No
Yes
73
End of Process
64
Select and Load Appropriate JDBC Driver
65
Retrieve and Process Metadata and Build Database Structure Object
66
Add Database Structure Object to Database Transfer Object and send to Client over HTTP
67
All Tables Processed?
Yes
No
68
Get Table Structure
69
Get Table Data
70
Store Table Data in Table Object
71
Add Table Object to Database Transfer Object
72
Send Database Transfer Object over HTTP
DataPortal Client
85
61
Transfer Request
62
Generate Server Request
86
Retrieve JDBC Driver for Target Database from the Server and Load
88
Server Responded?
No
Yes
90
Receive Database Structure Object
92
Create Database with Appropriate Table Structure
93
Server Responded?
No
Yes
94
Receive Database Data Object
96
All Tables Processed?
Yes
No
102
End of Transfer
98
Create Table with Appropriate Column Structure
100
Populate Table

FIG. 6

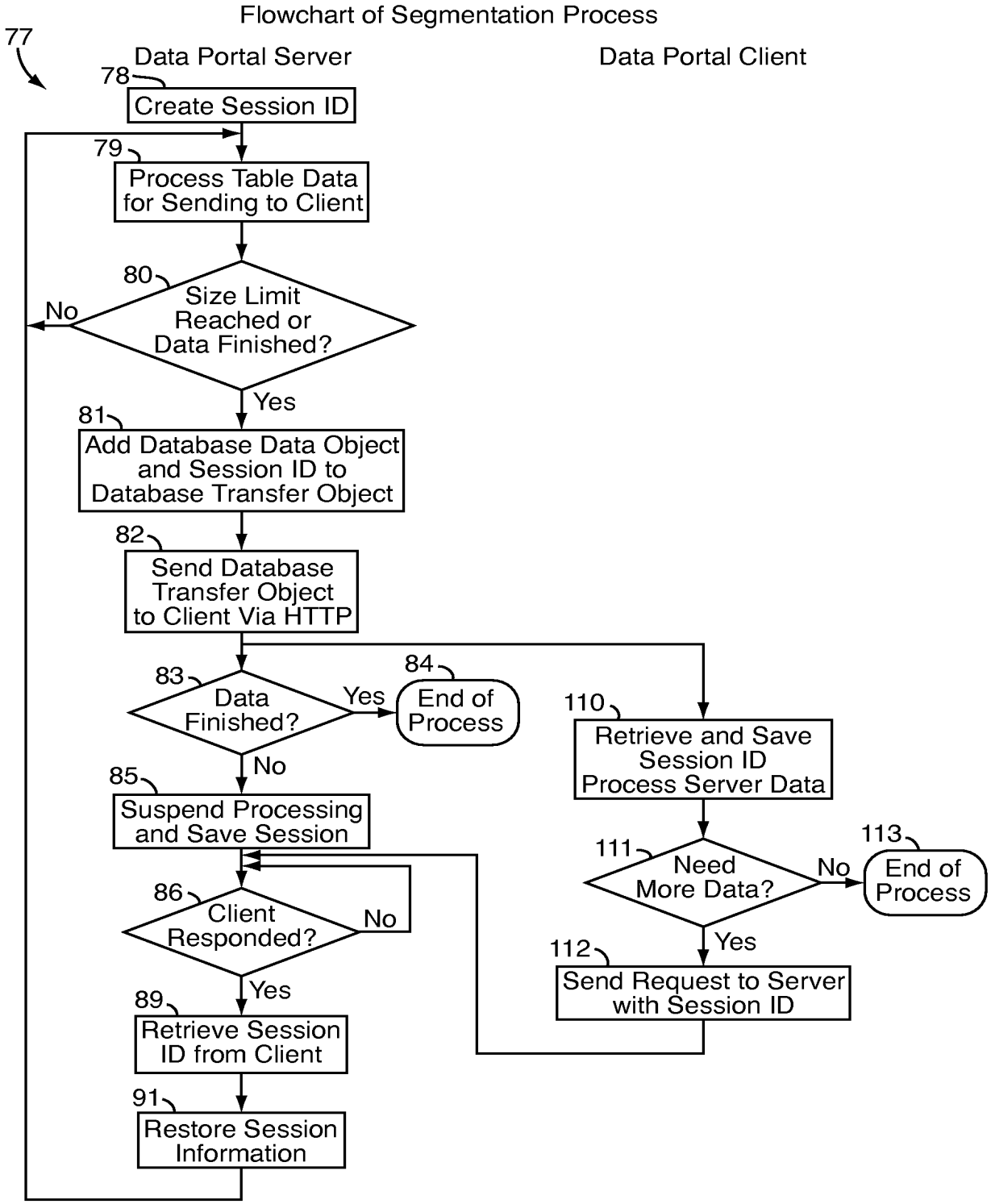
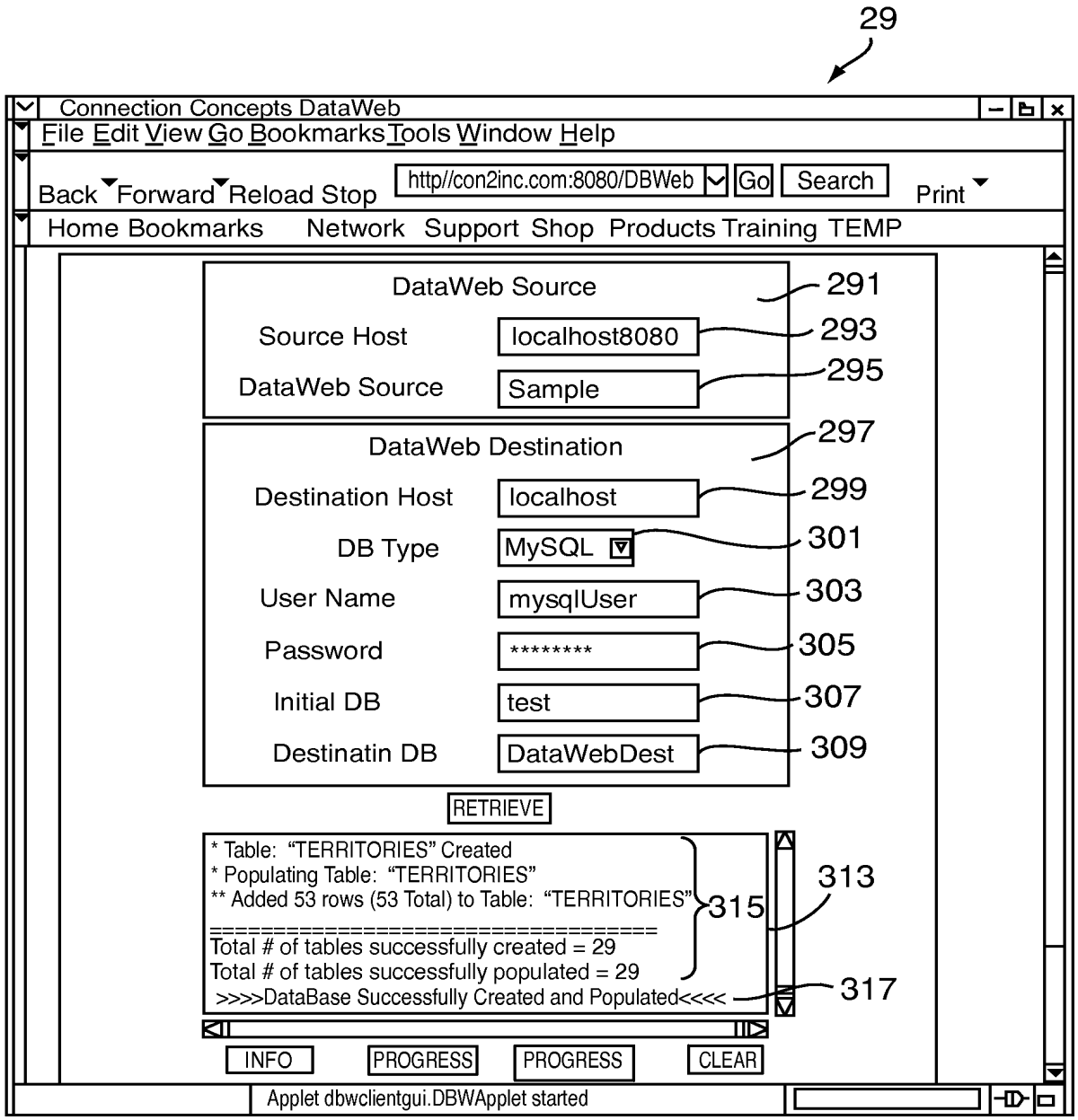

Flowchart of Segmentation Process
77
Data Portal Server
Data Portal Client
78
Create Session ID
79
Process Table Data for Sending to Client
80
Size Limit Reached or Data Finished?
No
Yes
81
Add Database Data Object and Session ID to Database Transfer Object
82
Send Database Transfer Object to Client Via HTTP
83
Data Finished?
Yes
84
End of Process
No
85
Suspend Processing and Save Session
86
Client Responded?
No
Yes
89
Retrieve Session ID from Client
91
Restore Session Information
110
Retrieve and Save Session ID Process Server Data
111
Need More Data?
No
113
End of Process
Yes
112
Send Request to Server with Session ID

FIG. 7



Applet Based *DataPortal* Client Session - Web Browser User Interface

FIG. 8